

## Inland Fisheries Monthly Report – October 2014

### Stock Assessment

**North Branch Potomac River** - the North Branch Potomac River Upper Catch-and-Return Trout Fishing Area just downstream of the Jennings Randolph Lake Dam was surveyed to monitor the status of the trout population. We found a trout population density of more than 500 trout per mile, which is one of the higher trout densities in recent years. We collected rainbow trout measuring up to 20 inches, brown trout up to 15 inches, and even a couple of beautiful brook trout. Thanks to the Garrett College's Fisheries Management Class for providing the necessary personnel needed to perform the survey.



*A wild rainbow trout from the NBPR C&R Trout Fishing Area, 2014.*

**Youghiogheny River** - Western Region I staff provided Youghiogheny River C&R Trout Fishing Area population data 1988 – 2014 to Steve Shreiner of Versar, Inc. Steve will be presenting this long-term study on the Deep Creek Hydro-station's temperature enhance releases, minimum flow requirements, dissolved oxygen augmentation, and catch-and-return trout management in the Youghiogheny River at the Maryland Water Monitoring Council Annual Meeting in November.

**Deep Creek Lake Tournament** - Western Region I staff collected black bass length and weight data at a tournament weigh-in at Deep Creek Lake. Fourteen teams with a five fish limit checked in 52 bass (23 largemouth bass and 29 smallmouth bass) for a catch rate of 3.7 bass per boat. Largemouth bass ranged from 315 mm, 438 g to 465 mm, 1348 g; while smallmouth bass ranged from 311 mm, 350 g to 410 mm, 902 g.

**Brook Trout** - Western Region Fisheries Technician Kenny Wampler entered and analyzed trout data from the 2014 trout sampling efforts. These data was given to Brook Trout Biologist Matt Sell where it will be entered into the brook trout data base for future reference. Kenny also constructed a spreadsheet for the recording of the new Aqu-i-S20E fish sedative.

**Jennings Randolph Lake** - Western Region I staff Johnson and Elenfeldt assisted the West Virginia DNR Fisheries Staff with a fall electrofishing survey in Jennings Randolph Lake. Ten established stations were sampled for 600 seconds of electrofishing effort.

Quality size smallmouth bass, largemouth bass, walleye, and channel catfish were collected.

**Potomac River** - Western Region II staff completed the annual electrofishing surveys to monitor the smallmouth bass and walleye populations in the nontidal Potomac River. More than 800 smallmouth bass were collected from 7 sites between Hancock and Edwards Ferry. Due to extremely low water levels, several sites were not navigable. Overall, the smallmouth catch rate, size distribution, and condition parameters are comparable to median values for the period between 2006 and 2013. The proportional stock density (PSD) and catch rates for preferred size and greater (14"+) bass declined slightly, the result of poor recruitment in 2008 and 2009. Large bass are still available to fishermen, however, evidenced by the 21" trophy smallmouth collected at Shepherdstown.

The electrofishing catch rate for legal size (15"+) Potomac River walleye remained similar to 2013 with a catch of 11 walleye per hour and is considered indicative of a strong population. Walleye YOY are difficult to catch during daylight electrofishing surveys so several additional surveys were conducted at night to evaluate yearclass strength. With one additional site yet to sample, it looks like the 2014 yearclass of walleye is good. A sample of young walleye were retained to determine to what extent the spring stocking efforts contributed to the yearclass. Fingerling walleye produced at Manning Hatchery were marked with OTC to identify them as hatchery stock.

**Potomac River BassMasters Tournament** – staff provided a truck-mounted 300 gallon aerated recovery tank for weigh-in of an open tournament sponsored by the Potomac River BassMasters held at the Big Slackwater ramp on the nontidal Potomac River. The tank gives the bass time to recover from the handling prior to release. This is also an opportunity for Fisheries staff to collect tournament catch data. Combined with creel surveys and annual electrofishing surveys, the tournament data helps identify and track population trends and fosters a good working relationship with an important constituent group. Fisheries staff will be collecting data from an open tournament scheduled for November 2 at Four Locks.

**Gunpowder Falls** - Central Region staff conducted electrofishing surveys in the Gunpowder Falls at the dam/Falls, Masemore Road and Blue Mount stations. The dam/Falls station had a 29% decrease in adult brown trout collected from 173 in 2013 to 123 in 2014. Brown trout recruitment increased in 2014 as 14 YOY brown trout were collected in the dam/Falls station compared to 3 YOY in 2013. The Masemore Road station had a 27% increase in adult brown trout collected from 211 in 2013 to 269 in 2014. Brown trout recruitment increased 332% from 73 YOY in 2013 to 315 in 2014 in the Masemore station. The Blue Mount station had a 50% decrease in adult brown trout collected in 2014. A total of 262 adults were collected in 2013 compared to 131 adult brown trout in 2014. Recruitment in the Blue Mount station increased 62% from 109 YOY brown trout collected during the survey in 2013 to 177 YOY collected in 2014. Staff from Inland Fisheries Western Region I and II of MDNR, MBSS, Washington

Metro Council of Governments and Montgomery County Department of Environmental Protection assisted with the surveys. Data will be analyzed for inclusion in the 2014 federal aid final report.

**Tidal Black Bass Surveys** - Central Region staff conducted tidal river black bass surveys at seven sites in Swan Creek, the upper Chesapeake Bay and the lower Susquehanna River. Data were sent to southern region for analysis.

**Little Seneca Lake** - Central Region staff surveyed 11 random sites over a two night period on Little Seneca Lake in Montgomery County. Along with the largemouth bass sampling, two stations were sampled to assess sunfish PSD. A total of 160 adult largemouth bass and 50 YOY largemouth bass were collected during the sample. The biggest largemouth bass collected was 19.3 inches and 4.4 lbs. Twenty-five largemouth bass over 16 inches were observed in the 11 stations. Little Seneca Lake continues to support an outstanding population of very healthy “football shaped” largemouth bass. One 26 inch channel catfish weighing over 9 pounds was also observed. No tiger muskies were observed during the survey. Data will be analyzed for inclusion in the 2014 federal aid final report.

**Clopper Lake** - Central Region staff surveyed four random sites on Clopper Lake in Seneca State Park, Montgomery County on the night of October 21. Sunfish were collected in two of the sites to assess sunfish PSD. Clopper Lake continues to support an abundant population of largemouth bass as 240 were collected ranging from 2.2 to 17.9 inches in length. Exactly 100 bluegill sunfish stock size and larger were collected as well as 18 redear sunfish stock size and larger. Data will be analyzed for inclusion in the 2014 federal aid final report.

**Impoundment Surveys** - Eastern Region completed three impoundment surveys this month. Conowingo Reservoir was sampled at night using two boat mounted electrofishing units. The Central Region Staff and Don Cosden assisted in the survey. Overall, largemouth bass, smallmouth bass and walleye of all sizes were very abundant. All three populations appear to have balanced size and age structures, and should offer excellent fishing opportunities. All fish collected were in excellent physical condition. One walleye was over 26 inches long and over six pounds! Large bluegill sunfish were also very abundant in certain habitats. Invasive flathead catfish were very scarcely encountered. In fact, only one individual was collected.



**Tuckahoe Lake** - A daytime electrofishing survey of Tuckahoe Lake was completed. Tuckahoe Lake currently supports one of the best largemouth bass fisheries in the Eastern Region. There were large numbers of 12-16 inch bass collected in the survey along with some quality-sized panfish and large chain pickerel.



**Wye Mills Lake** used to be one of the best largemouth bass fisheries in Eastern Region. A fish kill due to low dissolved oxygen that occurred in 2004 changed that. Since that time, management efforts have struggled to try to restore a balanced largemouth bass-bluegill fishery. The 2014 results yielded improved bass numbers and quality, but more supplemental stockings of bass are planned.



## **Habitat and Water Quality**

### *Environmental Reviews*

Provided comments to the Environmental Review Unit or other State Agency regarding:

- Time of year in-stream construction waiver request for a stream restoration project in Sand Spring Run in the Georges Creek Watershed. The Maryland Department of the Environment's Mining Program is conducting a stream restoration project by removing coal mine refuse from abandoned mines along this stream, and restoring the natural floodplain. This project will improve stream habitat by lessening the amount of acidic sediment from entering the stream, so we were comfortable with allowing the waiver.
- Time of year in-stream construction waiver request for a waterline crossing in an unnamed tributary of Jennings Run. The unnamed trib was almost dry and we requested the work be done as soon as possible to avoid any sedimentation issues once stream flow increased as well as in order to establish riparian cover as soon as possible.
- Aarons Run Road Landslide Emergency Project regarding the disposal of excess fill material on a reclaimed strip mine. We wanted to ensure that this disposal area be returned to forestland once the project was completed.
- An eight acre amendment to an existing strip mine (OPA 13-47, Tri-Star Mining). This proposed amendment is currently forestland, and DNR should request that a condition of the amendment would be to have a post-land use of undeveloped with trees to protect the long-term water quality in the Georges Creek Watershed.
- Time of year in-stream construction waiver for MANTA's stream gage upstream of the hatchery on Bear Creek. MANTA would like obtain stream flow data as soon as possible, and the installation of this gage would result in very little stream disturbance, so we were comfortable with allowing the waiver.
- Maryland Department of the Environment Mining Program regarding the reclamation of the limestone quarry in the Hoyes Run Watershed. Reclamation of the quarry is nearing completion, and it was agreed that the operators would cease pumping water out of the quarry and into Hoyes Run in order for the quarry to fill up to the streambed level as quickly as possible. The stream will then have a more stable flow regime which will help with better spawning conditions for trout this fall.
- Time of year in-stream construction waiver for an unnamed tributary to Braddock Run. This project will stabilize a high eroding bank along this tributary stream, and the stream currently has no flow – so we recommended the project be expedited before the flow returned in late fall.
- Integrated Policy and Review Unit regarding a SHA project involving Little Buffalo Run flowing underneath I-68. Brook trout are present in this stream, so strict compliance to the best management practices for this project must be made.
- Also conducted a field review on a US Rt. 40 failing culvert lining project in an unnamed tributary to the Casselman River. The deteriorated pipes that are scheduled to be repaired are settling, which is causing a joint (above the pipes) in an 8-inch sewer line to leak sewage. SHA anticipates this sewer line will fail if it

cannot repair it until after the Use III restriction period. Numerous creek chubs in were observed during the field visit. No brook trout were observed, however that doesn't mean that they are not present in the stream - although with that many creek chubs, stream temperatures are probably getting at the brook trout temperature tolerance level. If the SHA deems this as an emergency project so the sewer line does not rupture - a waiver for the in-stream construction restriction period can be granted. We are more comfortable allowing for a waiver after seeing a large school of creek chubs rather than brook trout in this stream.

**Maryland Marcellus Coalition** - Western Region I staff and volunteers collected water quality samples from streams within the Bear Creek, North Branch Potomac River, and Block Run Watersheds. We obtain monthly water quality data on these streams for baseline conditions prior to any potential Marcellus gas drilling.

### **North Branch Potomac River Water Quality Sampling**

- Western Region I staff retrieved temperature data from five stations in the river from the lower Catch and Return Trout Fishing Area downstream to Black Oak, as well as from Georges Creek and the Savage River. These data were sent to the US Army Corps of Engineers in order to determine the effectiveness of special coldwater releases from Jennings Randolph Lake during hot days in order to protect the trout resources downstream of Westernport. Results are pending.
- Western Region I staff obtained turbidity measurements in the river both upstream and downstream of the Upper Potomac River Commission's Wastewater Treatment Plant in Westernport. We have received numerous complaints from anglers this year regarding the poor fishing conditions due to high turbidity and color in the river downstream of the wastewater treatment plant's effluent. These data we obtain will attempt to correlate poor fishing conditions with turbidity values.



*North Branch Potomac River upstream of effluent turbidity = 5.6 NTUs versus downstream of the effluent turbidity = 12.9 NTUs on 10/14/14.*

- Western Region I Fisheries Technician Kenny Wampler worked with Matt Lawrence in constructing maps to show locations of aquatic invertebrate sampling

stations and temperature monitoring stations on the North Branch Potomac River to continue the monitoring of the river's health.

### **Fish Health**

Western Region I Biologist Jody Johnson checked Dan's Mountain Pond for a potential fish kill after a fall trout stocking. Water quality analyses showed no concerns and trout were observed feeding.

### **Outreach**

Western Region I staff responded to numerous angler information requests including fall trout stocking areas, status of the trout population in Muddy Creek, fishing license requirements, Youghiogheny C&R trout fishery, Evitts Creek Ponds maintenance, and fishing license exemptions for New Germany Lake for the youths at the DJS centers in Garrett County.

Western Region I staff conducted a stream ecology demonstration for the students enrolled in Allegany College's Wildlife Management Class. The students participated with an electrofishing survey of Evitts Creek, where they were able to collect smallmouth bass, redbreast sunfish, rock bass, fallfish, central stonerollers, sculpins, and a few darters species. The students then collected and were able to identify aquatic macroinvertebrates and rate stream health based on the samples. We spoke on the importance of maintaining a fully forested riparian zone for fish habitat and water quality protection.



*Fisheries Technician Kenny Wampler electrofishing Evitts Creek with Allegany College Wildlife Management Class students.*

Western Region I Manager Alan Klotz was the guest speaker at the 26<sup>th</sup> Annual Garrett Soil Conservation District's Cooperators Dinner with more than 100 people in attendance. He presented the "Cove Run Brook Trout Restoration Project" which involved the cooperation of three agricultural landowners in order for the project to be successful. The hope of the Soil Conservation District was that more landowners would be interested in establishing protected riparian zones once they saw this presentation.

Also gave the presentation to 4-H Club members in the Friendsville area of Garrett County, trying to spark some interest in a fencing project on one of their farms.

**Becoming an Outdoor Woman Workshop** – Letha Grimes provide instruction for the “Let’s go Fishing” class which teaches basic fishing techniques, fish handling, filleting and cleaning, and several methods of cooking their “catch”. Participants were able to sample some northern snakehead during the annual game feed evening program. Thanks to Southern Region staff for collecting the fish for the program.

**CPR and First Aid training** - Josh Henesy provided two classes for DNR staff. Earlier this year Fisheries staff were able to put their training to use and render aid to an accident victim.

**Beaver Creek** - John Mullican prepared a map of the Beaver Creek Special Trout Management Area delineating access and individual land ownership for the Land Acquisition and Planning Unit (LAP). Habitat restoration and trout management activities have allowed the wild brown trout population in Beaver Creek to become one of the strongest in the State and a popular fishing fly fishing destination. Access and fishing is entirely on private property through the generosity of the landowners. Inland Fisheries is working with LAP to secure future public access through land and/or easement purchases.

### **Stocking and Population Management**

Western Region I staff assisted Hatchery Division staff with fall trout stocking in several Put and Take, Delayed Harvest, and Catch and Return Trout Fishing Areas.



*Garrett College Fisheries Management Class students stocking rainbow trout in the NBPR upper C&R Trout Fishing Area.*

Brookfield Power Company and the Youghiogheny Chapter of TU purchased 5,200 fingerling brown trout from Laurel Hill Trout Hatchery that were float-stocked in the Youghiogheny River Catch and Return Trout Fishing Area by Western Region I staff.



*Kenny and Eric embarking on a float-stocking adventure down the Youghiogheny River.*

Nearly 40,000 fingerling golden shiners produced at Manning Hatchery were stocked into Greenbrier Lake to supplement the existing forage base for largemouth bass. The bass population in Greenbrier is characterized by a very abundant population with the majority of the population within the stock - quality increment. Relative weights, a measure of fish condition, are generally poor.

Western Region II staff completed the fall Put-and-Take stocking efforts. Adult rainbow and brown trout were stocked into Middle Creek, Friends Creek, Owens Creek, Carroll Creek Youth and Blind Trout Fishing Area, Little Antietam Youth and Blind Fishing Area, and the Little Tonoloway Creek Youth and Blind Fishing Area.

Western Region II stocked 2500 warmwater strain rainbow trout (large fingerlings) into Antietam Creek to maintain a popular put and grow fishery. Antietam Creek is a marginal coldwater stream and summer temperatures can get to stressful levels during hot, dry years. However, during favorable conditions trout grow very quickly in this environment and fishermen routinely catch trophy size trout.

Central Region staff stocked approximately 12,000 golden shiners (220/lb.) from Cedarville Hatchery into Centennial Lake in Columbia, Howard County to supplement the forage base in the lake.

Central Region staff stocked brown and rainbow trout from Cushwas and the Freshwater Institute into nine streams, two lakes and one pond for the fall trout stocking season.

Fall trout stocking was completed in Eastern Region. Rising Sun Pond, Big Elk Creek and Tuckahoe Creek all received fish. Howards Pond in Cecil County was unable to be stocked due to an ongoing construction project at the Elkton Water Treatment Plant

located adjacent to the pond. Those fish were split evenly between Big Elk Creek and Rising Sun Pond, both of which are located within Cecil County a short distance away.

### **Angler Access**

Western Region I personnel Jody Johnson, Kenny Wampler, and Eric Elenfeldt have been placing fisheries management informational signs areas, maintaining didymo wader wash stations, and conducting land maintenance at the North Branch Potomac River and Evitts Creek Ponds Fishery Management Areas. These duties consisted of the usual mowing and trash clean up as well as fixing of a clogged intake pipe at the Evitts Creek Ponds. Staff is constructing a new intake for the pond to reduce the risk of future clogging.

As a follow up to the September meeting with Baltimore County park staff concerning the possibility of opening up the quarry at Oregon Ridge Park to fishing, Central Region staff conducted a 1004 second daytime electrofishing survey around the entire perimeter of the quarry on October 24. The quarry has some shallow areas around the perimeter but quickly drops off to 45 feet. Forty-seven largemouth bass were collected ranging from 3.3 to 13.2 inches. Very few YOY or intermediate size largemouth bass or bluegill sunfish were observed and most sunfish were of quality size to 8.9 inches suggesting the bass eat what little forage is available. The only other species observed or collected was redbreast sunfish.

### **Brook Trout Program**

Central Region staff surveyed a 0-order tributary to Spooners Creek in Harford County. Ecotone requested a waiver for in-stream work in the tributary but after the survey revealed two brook trout in a small pool on the site, a waiver will be denied.

Brook trout staff participated in several planning sessions for the upcoming brook trout symposium at the annual "Restoring America's Estuaries" conference in Washington D.C., November 3-6, 2014. Alan Heft will be a panelist and will present an overview of the utility to Eastern Brook Trout Joint Venture member states of the Brook Trout Pilot model for the Chesapeake Bay. Partners on the panel include the USFWS, the NALCC, and West Virginia University.

Brook trout staff began the compilation of the brook trout data collected following the 2014 statewide monitoring schedule by regional staff and brook trout program staff. This data will be analyzed and included in the brook trout GIS database during the coming months.

Brook trout staff member Matt Sell was invited to speak at the Potomac-Patuxent Chapter of Trout Unlimited's monthly meeting in Silver Spring. Matt presented information on brook trout life history, as well as discussed future research needs such as voluntary angler diaries. As usual, staff was given a warm welcome.

Brook trout staff compiled data on the upper Gunpowder River watershed and shared it with a group of concerned citizens and conservation organizations interested in restoring brook trout there. This is a beginning step in the process to restore the upper Gunpowder to a fully connected brook trout fishery.

Brook trout staff member Matt Sell attended a two-day Off-Highway-Vehicle (OHV) workshop at New Germany State Park. The purpose of the workshop was to inform DNR employees on how to build and maintain OHV trails on public land in a sustainable fashion. Experts from the National Off-Highway Vehicle Conservation Council were in attendance to direct the workshop and a lively discussion was had. Subsequently staff discussed water quality, habitat, and brook trout population monitoring options for brook trout populations downstream of the St. John's ORV site with staff from the Savage River State Forest. Discussions are ongoing for developing and implementing a long term monitoring program to determine any impact from the ORV trails.

Brook Trout staff, with the cooperation of Western I staff and other regional staff, are tagging northern pike in Deep Creek Lake in order to gain more knowledge about movements, growth rates, catch rates, and harvest rates of this trophy fishery. Scale samples and length are being collected from each fish caught to estimate age-at-length and the fish are then fitted with a yellow FLOY tag. Tagging began in September and will continue in perpetuity. To date, 19 pike have been tagged, ranging in size from 26-40". Further, outdoor radio show host, Allan Ellis made a trip west to see what the program was about and try his luck at catching a fish to tag. Here are some fine examples of a few of the pike we have tagged...





### **Other**

Brook Trout staff provided information to regional staff about purchasing an iPad for field data collection. Additionally, staff provided technical information and experiences to regional staff in order to make their decision over which model to purchase a bit easier.